

# Strengthening Climate Adaptation and Resilience (SAR)

## Building Pakistan's Climate Resilience

### The Challenge

Pakistan ranked among the countries most affected by climate change due to its low adaptive capacity and fragile infrastructure. The Germanwatch Climate Risk Index 2022 identified Pakistan as one of the countries most severely affected by extreme weather events. Between 2000 and 2022, over 765,000 lives were lost and global economic damages reached USD 4.2 trillion, highlighting the rising frequency and intensity of extreme weather events. The World Bank's Country Climate and Development Report (2022) warned that Pakistan could lose 18–20% of GDP by 2050 without timely and effective adaptation. As a result, more than 21 million people were projected to fall into poverty by mid-century, a situation further exacerbated by the limited technical and financial capacity of public institutions and communities.

### Our Approach

The project supported the Government of Pakistan in enhancing climate adaptation, resilience, and risk management. The entire climate adaptation cycle has been addressed under the SAR Project, from risk assessments to governance and local implementation, including access to international climate finance for scaling up and sustainability. This is in line with Pakistan's National Adaptation Plan (NAP) and the Global Nationally Determined Contributions 3.0. Specifically, the project supported the government in three areas:

- Climate Risk Assessment and Analysis
- Planning and Financing for Climate Adaptation
- Accessing International Climate Finance

Project name	Strengthening Climate Adaptation and Resilience in Pakistan (SAR)
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Pakistan, South Asia
Lead executing agency	Ministry of Climate Change and Environmental Coordination (MoCC&EC)
Duration	11.2021 – 12.2025

### Achievements

#### (1) Climate Risk Assessments

**Climate Risk Assessments, Information and Data:** One national and two sub-national Climate Risk Profiles for KP and Punjab were developed. In addition, 10 gender-sensitive Climate Risk Assessments (CRAs) for priority sectors were produced. All documents were the result of structured capacity-development efforts and are now actively used for informed decision-making at provincial and local levels. 4 gender-sensitive Local Adaptation Plans of Action (LAPAs) were jointly developed with the implementing partner LASOONA and formally endorsed by local governments.

In collaboration with GCISC, SAR supported the development of the Pakistan Climate Information Portal (PAKCIP), a national platform serving as a central hub for climate data, tools, and resources. To ensure long-term sustainability of the platform, SAR trained six government officials (including two women) on system architecture, user interface design, database management, workflows, and testing. The portal strengthens evidence-based policymaking, enhances public understanding of climate risks, and improves Pakistan's capacity for informed climate planning and resilience building.

**Research, Gender & Intersectionality:** To advance the understanding of gender and intersectionality in climate action, the project partnered with NUST University to host an



*Pg. 1, Left: Government partners at the launch of national and provincial Climate Risk Profiles.*

*Right: Women helping climate smart agricultural practices in southern Punjab.*



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**Pg. 2, Left:** Climate finance training for government stakeholders organised in collaboration with joyn-coop.  
**Right:** Launch of the landmark Climate Change Cell of KP Planning and Development department, supported by BMZ.

international conference. The event generated ten peer-reviewed research papers, strengthening the knowledge base on inclusive climate resilience in Pakistan.

**Media Engagement & Climate Communication:** In collaboration with CEJ-IBA, 24 journalists (including 11 women) from KP and Punjab received training on climate reporting to enhance their ability to produce accurate and impactful stories. A dedicated resource book for journalists on climate change was also developed and published.

(2) Planning and Financing Climate Adaptation

The project supported partner institutions in KP and Punjab to develop planning, financing and risk-management capacities for climate adaptation and resilience. A Climate Change Cell was established within the KP Planning and Development Department, which led to the enactment of the KP Climate Action Board Act in June 2025, formally establishing the KPCAB to steer and coordinate provincial climate action.

**Climate Literacy & Community Engagement:** Climate literacy activities reached more than 14,000 students in KP and Punjab, with girls representing 52% of participants. A total of 1,003 farmers were trained on climate-smart and innovative agricultural practices. The establishment of 40 women-led food production gardens enabled 310 community members to adopt and replicate these practices. Additionally, eight Climate-Smart Agriculture (CSA) technologies were demonstrated across both provinces, showcasing practical, scalable solutions for climate-resilient agriculture.

**Capacity Development & Higher Education:** Six climate-related courses were delivered for civil servants, academia, and sector professionals. The project further supported eight diploma programs in collaboration with the Universities of Kassel and Potsdam, UNITAR, and IMS. Developed through year-long training cycles and supported by expert lectures, these programs trained 207 participants (including 65 women) and helped address key gaps in Pakistan's climate curriculum. Furthermore, 7,159 participants enrolled in e-learning modules hosted on the UNCC Learning platform.

(3) Accessing International Climate Finance

The project supported the Government of Pakistan in enhancing its ability to access international climate finance for adaptation, resilience, and risk management. This has been a key focus of the SAR project. SAR strengthened the capacities of more than 95 decision-makers and experts (including 23 women) from partner institutions and national experts through targeted training modules on accessing adaptation finance, meeting donor requirements and preparing 4 bankable gender-sensitive funding applications for the Green Climate Fund (GCF) and 2 for the Adaptation Fund (AF).

**Innovation, Agriculture & Livelihoods:** The project supported the establishment of a Business Incubation Centre (BIC) at KFUEIT as well as climate-smart model farms. These facilities provided practical, hands-on training to 288 farmers (including 67 women) and have since evolved into active learning hubs for best practices in climate-smart agriculture.

At the local level, SAR's Adaptation Challenge Fund (ACF)—piloted three gender-transformative innovative financial instruments to strengthen vulnerable communities.

- In Chitral (KP), KADO with Jazz Mosafir piloted Pakistan's first index-based crop insurance scheme for smallholders affected by erratic rainfall and GLOFs, insuring 210 apple growers and 298 wheat farmers, with payouts linked to rainfall thresholds.
- In Nowshera (KP), Rural Aid and MS Worldwide tested a community-led precision agriculture model using drone technology, supporting 75 farmers and assessing over 120 acres of farmland.
- In Muzaffargarh (South Punjab), PRSP supported over 500 women through interest-free loans for climate-resilient enterprises.
- In Charsadda and in Nowshera, SAR adapted SRSP's women-led village bank model to the climate context, enabling 11 Women Village Banks to independently manage climate adaptation funds. These banks have supported 450 women in strengthening their financial and climate resilience.